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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

WONG, ALLEN C

ART UNIT PAPER NUMBER

2613

DATE MAILED: 08/16/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/348,165

Applicant(s)

NAKAGAWA ET AL.

Examiner

Allen Wong

Art Unit

2613

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-13 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \*   c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.  |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)              | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> . | 6) <input type="checkbox"/> Other:  |

**DETAILED ACTION**

***Specification***

1. The disclosure is objected to because of the following informalities: on page 2, line 6, "differentce" should be spelled as "difference".

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2 and 6-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Lynch (5,198,901).

Regarding claim 1, Lynch discloses a motion vector encoding device for encoding motion vectors of respective blocks obtained by partitioning each frame of moving image data, comprising:

predicting means for predicting a motion vector of a target block based on motion vectors of a plurality of blocks adjacent to the target block (fig.14, element 17);

determining means for determining accuracy of a prediction made by said predicting means based on degrees of non-uniformity of the plurality of motion vectors (fig.14, element 68; note nature of an image in an area adjacent to a target block is recognized); and

encoding means for encoding the motion vector of the target block using a result of the prediction made by said predicting means with an encoding method determined based on a result of a determination made by said determining means (fig.14, element 13; note in fig.14, "MODE" or an encoding method is determined as evidenced by the arrow that exits from element 68 to element 13).

Note claims 6-10 have similar corresponding elements.

Regarding claim 2, Lynch discloses the determining means (fig.14, element 68).

Regarding claim 11, Lynch discloses a motion vector decoding device for decoding an encoding result which is obtained by encoding motion vectors of respective blocks obtained by partitioning each frame of moving image data, comprising: predicting means (fig.17, note "PREDICTION" is done); determining means (in fig.17, note "MODE" is determined); and decoding means (note fig.17, element 98 is a decoding means).

Note claims 12-13 have similar corresponding elements.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynch (5,198,901) in view of Ueno (4,951,140).

Lynch does not disclose the plurality of individual encoding means and the selecting means. However, Ueno teaches the plurality of encoding means (fig.1, element 18; note encoder 1-N) and the selecting means (fig.1, element 19). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Lynch and Ueno, as a whole, for permitting the encoding of motion vectors after the determination of the nature of an image in an area adjacent to a target block so as to efficiently encode in an accurate, precise manner. Doing so would produce high quality images at the display output.

Regarding claim 4, Ueno discloses the plurality of individual encoding means with different variable-length codes (note fig.1, element 18 has multiple encoders 1 to N).

#### ***Allowable Subject Matter***

5. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not disclose the specifics of the combination of limitations of claim 5. Thus, claim 5 has patentable weight and would be allowed if the subject matter is incorporated into claim 1.

#### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen Wong whose telephone number is (703) 306-

Art Unit: 2613


5978. The examiner can normally be reached on Mondays to Thursdays from 8am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (703) 305-4856. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Allen Wong  
Examiner  
Art Unit 2613

AW  
August 13, 2002

  
CHRIS KELLEY  
SUPERVISORY PATENT EXAMINER  
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